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Name of Applicant, Assignee or  
Registered Representative

  
Signature

9/30/99

Date of Signature

Our Case No. 4645/39-1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

RONALD O. BUBAR

Serial No.: 08/968,900

Filing Date: March 8, 1999

For: LAMINATED PIZZA CRUST

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Examiner Lien Tran

Group Art Unit No. 1761

**DECLARATION OF RONALD O. BUBAR  
UNDER 37 C.F.R. § 1.132**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

1. I, Ronald O. Bubar, am the named inventor for the above-captioned patent application.
2. I am employed by Luigino's, Inc. as its President. I have been employed by Luigino's since 1990. Luigino's specializes in frozen food products, many of which utilize frozen doughs.



3. I have been working in the field of mass-production dough-making since at least 1981.

4. I therefore believe that I am a person skilled in the art of dough-making and the mass-production of dough-related products.

5. Between the years of 1980 and 1985, I was employed by Jeno's, Inc. in Duluth, Minnesota and Wellston, Ohio.

6. While employed at Jeno's, Inc., I worked extensively with Mr. Jeno F. Paulucci in the area of production dough-making for frozen pizzas. At that time, Mr. Paulucci was also employed by Jeno's Inc. Mr. Paulucci is presently the assignee of the present patent application and the founder of Luigino's, Inc.

7. During my employment at Jeno's, Inc., I worked extensively with Mr. Paulucci on a production method for making dough products and pizza crusts. Some of these are the methods and products disclosed in U.S. Patent No. 4,842,882 (the "882 patent"), which issued to Mr. Paulucci on June 27, 1989. I understand that the '882 patent is presently assigned to The Pillsbury Company as a result of their 1985 acquisition of Jeno's, Inc.

8. From my work at Jeno's, Inc. and with Mr. Jeno F. Paulucci, I am intimately familiar with the crust-making examples set forth in the '882 patent. I have therefore worked on both the laminated crust of the present invention and the crusts illustrated in the examples of the '882 patent. In particular, I am very familiar with "EXAMPLE 6" shown in column 10 of the '882 patent and the resulting dough and crust products associated therewith.

9. In general, as I had observed during numerous tests of the products, the dough crust products described in the '882 patent are "bready" products that have a porous, open, rounded internal cellular structure. This is similar to the structure of a well-risen loaf of baked bread having a very airy interior.

10. Although Example 6 of the '882 patent states that the dough is "laminated" and that the finished crust is "laminated," the use of the term "laminated" in the example does not mean that the product described in Example 6 will produce layers of dough

separated by layers of fat. To the contrary, as I have noted above, the crust produced by Example 6 has a "bready" porous interior without significant layer separation.

11. One reason for this result is that the method of Example 6 utilizes shortening flakes that are distributed in the dough. Because the flakes are relatively dry, and formed of separated particles that do not adhere to each other, the flakes end up distributed throughout the dough when the processing is completed. Since the dough is stretched, the flakes separate from each other and distribute throughout the dough in a random fashion.

12. Thus, the shortening flakes in Example 6 are introduced between the sheets of dough, but the final crust product is not "laminated" as the term is used in the present application. In other words, the resulting finished crust from Example 6 of the '882 patent does not exhibit a uniform, multi-layered structure of fat separating multiple layers of dough. The "lamination" term as used in the '882 patent instead relates to the adhesion between the upper and lower surfaces of the cooked pizza crust and the mere introduction of the flaked shortening between layers.

13. When developing the crust of the presently claimed invention method, the goal was to obtain a pizza crust that had a crisp outside and a flaked multi-layered interior similar to the interior of a croissant. Most importantly, a crust was sought that would retain those properties and be structurally stable after being frozen and reheated in a microwave oven. The method of Example 6 of the '882 patent resulted in a completely different crust compared to the present invention, one that was not microwaveable nor flaky (in the sense of a croissant-type structure as opposed to a porous-type structure), and therefore a completely different approach was taken and a drastically different method was developed to produce a crust having these unique, unconventional qualities.

14. I have performed numerous noncontemporaneous tests on products resulting from both of these methods.

15. There are several major differences between the method of the present invention and the method described in Example 6 of the '882 patent. For example, the extrusion of a smooth margarine at the claimed point in the instant process produces

even, homogeneous layers of fat that result in the multi-layered, laminated structure in the finished crust. This produces a croissant-like interior structure and a crispy outer crust. Margarine is an emulsified fat in a viscous form, and thereby exhibits spreading qualities very different from shortening flakes. The even distribution of fat between the layers of dough in the multi-layer structure, in addition to the other claimed process steps, makes the dough microwaveable.

16. Furthermore, the step of proofing the dough *before* sheeting of the dough layers and the introduction of the smooth margarine also greatly affects the quality of the finished product. In the example of the '882 patent, the dough is proofed *after* the sheeting process.

17. If one compares a cut-away cross-section of the baked crust of the Example 6 of the '882 patent side-by-side with a section of the crust of the present invention, distinct and unexpected differences in the qualities between the two are readily apparent. The crust of the present invention is more compact, but has many more large-flaked layers. The structure of the crust of the present invention is uniform due to the multiple uniform layers, and include large, thin flakes similar to a croissant. The crust of the present invention is also significantly more stable due to this structure in that it is crisper and more uniform after microwaving. In contrast, the crust made in accordance with Example 6 of the '882 patent is much thicker and includes very large pores in the interior. The flakes of dough in the interior of the crust are much smaller and distributed throughout the interior in a very random fashion. Furthermore, large, round, open pores are present throughout. This is noted on line 34 of column 10 of the '882 patent, which notes that the internal structure comprises "open cells ranging in size from 1/8-inch to 1/4-inch." These are large cells that would be undesirable for use in a microwaveable dough because these cells would fill with steam during microwaving and cause the crust to become soggy, unstable, and tough in some areas.

18. Similarly, if one compares side-by-side the cutaway portions of the crust of Example 6 with the crust of the present invention after both crusts are frozen and then microwaved, it is apparent that the structure of the crust of the present invention remains surprisingly intact and exhibits similar qualities to the freshly baked crust. In

contrast, the crust of Example 6 of the '882 patent exhibits a non-uniform, cardboard-like or soggy structure with collapsed pores that is not ideally suited for holding heavy pizza topping and supporting it through a microwaving process.

19. A summary of the observations of my tests is illustrated in the following data table:

PROPERTY OF CRUST OBSERVED	CRUST MADE ACCORDING TO THE '882 PATENT	CRUST MADE ACCORDING TO THE PRESENT INVENTION
Interior pores 0.125 to 0.25 inches in diameter	+	-
Crispy outer crust	+	+
Non-round, uniform interior pores	-	+
Multiple, evenly distributed layers of fat and dough	-	+
Uniform general interior structure	-	+
Structure remains intact after freezing and microwaving	-	+
Presence of large flakes	-	+

20. The resulting pizza crust exhibits the unique characteristics of being uniformly layered with fat and dough, thereby containing croissant-like large flakes between stable, crispy outer surfaces even after being frozen and microwaved. The dough retains this structure remarkably well even after baking, topping, freezing and reheating in a microwave oven. The crust of the Paulucci '882 patent does not exhibit the qualities of the present crust, including structural stability, large flaked layered structure and crisp upper and lower surfaces. The crust of the '882 patent also was not in our view a commercially desirable product after it was frozen and microwaved because it was too soggy, irregular and unstable.

21. When the present invention was developed with the intention to produce a crust having the improved qualities of structural stability, large flaked layered structure and crisp upper and lower surfaces, the degree of improvement in microwavability of the

resulting crust over the crust produced in the '882 patent was unexpected and surprising. In this regard, the method of the '882 patent did not suggest that the claimed process steps would produce a product having such improved microwavable properties. These properties are so improved over what has been done previously that Luigino's has used the resulting crust product in a number of commercially successful products other than pizzas.

22. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated:

9/30/99

Ronald O. Bubar  
Ronald O. Bubar